INCH-POUND

MIL-DTL-21604/3C 27 June 2003 SUPERSEDING MIL-S-21604/3B(SH) 30 March 1992

#### **DETAIL SPECIFICATION SHEET**

#### SWITCH, ROTARY, MULTIPOLE AND SELECTOR, 5 AMPERE,

#### STYLE JL

This specification is approved for use by the Navy Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-DTL-21604.

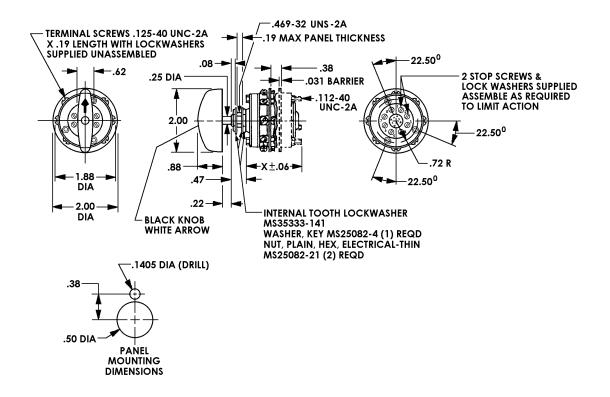
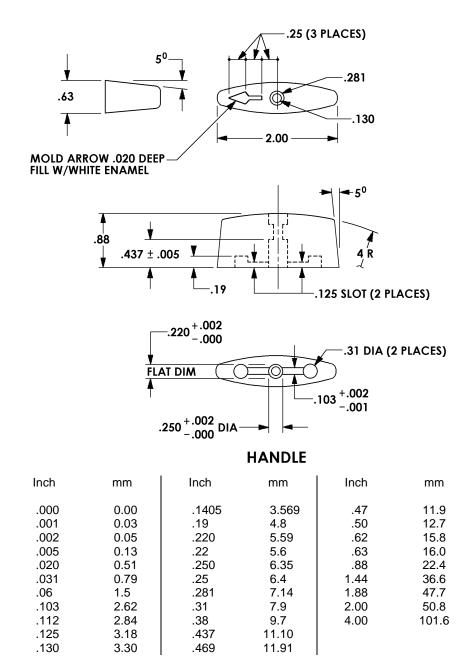


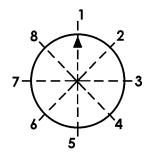
FIGURE 1. Style JL switch.

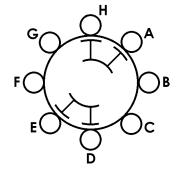


#### NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
- 3. Unless otherwise specified, tolerances are  $\pm$  .016 (0.41 mm) for two-place decimals and  $\pm$  0.005 (0.13 mm) for three-place decimals.
- 4. On switches of 6 to 10 sections, the securing rods shall extend .50 inch (12.70 mm) beyond the hex nuts at the rear of the switches to facilitate attachment to rear supports. A hex nut and lockwasher shall be provided for each extension rod.

FIGURE 1. Style JL switch - Continued.

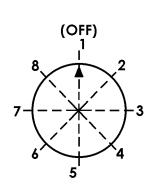


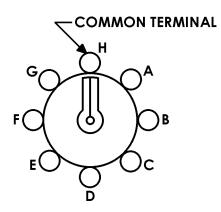


**HANDLE POSITIONS** 

TYPICAL SECTION DOUBLE POLE DOUBLE BREAK

## **ROTOR DESIGNATION 2**





**HANDLE POSITIONS** 

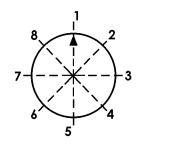
TYPICAL SECTION SINGLE POLE SELECTOR

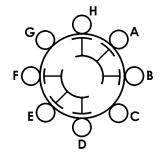
# **ROTOR DESIGNATION 3**

NOTE: VIEWED FROM THE HANDLE END.

FIGURE 2. Rotor contact configuration and handle positions.

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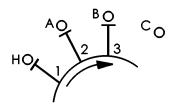


HANDLE POSITIONS

TYPICAL SECTION DOUBLE POLE TRIPLE BREAK

# ROTOR DESIGNATION 4 $\frac{1}{2}$

# WITH ROTOR CONFIGURATION 4, CONTACT H-1 BREAKS BEFORE C-3 MAKES, AND CONTACTS A-1 AND B-1 MAKE BEFORE A-2 AND B-3 MAKE



### NOTE: VIEWED FROM THE HANDLE END.

FIGURE 2. Rotor contact configuration and handle positions - Continued.

#### **REQUIREMENTS:**

Dimensions and configuration: See figure 1, figure 2, and table I.

Angle of throw: 45 degrees. Switching action: Detent. Electrical loads:

AC current: 5 ampere.

Voltage: 125 volts (at 60 and 400 Hz, 0.80 inductive power factor).

Temperature rise: 15°C maximum.

Contact material:

Rotor: Silver-overlay phosphor bronze.

Stator: Silver-overlay copper. Stop torque: 30 inch-pounds.

Barriers: See figure 1.

Terminal marking: Adjacent to terminals on switch section.

Stop marking: See figure 1.

Qualification samples: See table II.

#### MIL-DTL-21604/3C

TABLE I. Type designation and switching characteristics.

Type of Component	lesignation Rotor designation <u>1</u> /	Style	Number of sections	Dimension "X" <u>2/</u> ± .062 (1.57)	Approximate weight (ounces)	Maximum rotational torque (inch-pounds)
888888888	2 2 2 3 3 3 4 4 4	JL JL JL JL JL JL JL	3 5 10 3 5 10 3 5	1.91 ( 48.41) 2.66 ( 67.46) 5.28 (134.14) 1.91 ( 48.41) 2.66 ( 67.46) 5.28 (134.14) 1.91 ( 48.41) 2.66 ( 67.46) 5.28 (134.14)	8 10 16 8 10 16 8 10	9 11 16 9 11 16 9 15 20

TABLE II. Qualification test samples.

Sample switch	Test number 1/	Sample switch	Test number
S2JL10	1	S3JL10	4
S2JL10	2	S4JL10	1
S3JL10	3	S4JL10	2
S2JL10	4	S4JL10	3
S3JL10	1	S4JL10	4
S3JL10	2	S4JL10	5
S3JL10	3	S4JL10	6

 $<sup>\</sup>underline{1}/$  Test numbers in accordance with table II of MIL-DTL-21604.

Custodians: Navy - SH DLA - CC

Preparing activity: DLA - CC

(Project 5930-1749-02)

 <sup>1/</sup> For rotor designation, see figure 2.
 2/ Dimensions are in inches. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.